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## Description

The present invention relates to a sheet assembly for simple and quick manual work of applying a polish or like composition to an object and polishing it. The object to be polished may be a shoe, a car or furniture, for example.

Sheets impregnated with polishing oil of known types are typically provided in hotel rooms or the like for free service for cleaning shoes. Such sheets, however, are not of the nature which positively give shoes their original gloss since the oil is not a shoe polish, though capable of achieving the cleaning function only. British Patent Specification 899016 discloses a rubber glove carrying a perforated container housing soap which can be dissolved and thus can flow from the container when the glove is immersed in water. Such a construction is not suitable for use with polish which would leak from the perforations of the container at inappropriate times.

A sheet assembly for polishing work embodying the present invention can carry therein a shoe polish and, therefore, perform regular shoe polishing work in addition to the simple cleaning work. This allows shoes to be polished positively, easily and quickly.

It is an object of the present invention to provide a portable sheet assembly which can readily and quickly polish a desired object such as a shoe, a baseball glove or furniture or even avoid misting of glass when applied thereto. In order to achieve this object, the sheet assembly of the present invention is provided with a portion for retaining an intended composition for polishing work, which may thus be shoe polish or like polishing material, wax for preservation of hide, or anti-misting material. Such sheet assemblies will prove desirable when installed in rooms for free service.

A sheet assembly according to the present invention comprises a first sheet means defining a first chamber; a second sheet means provided in said first chamber and defining a second chamber therein in an air-tight sealed condition; and a composition contained in said second chamber, said second sheet means is bonded to said first sheet means and is formed of a plastic material rupturable when said second chamber has manual force applied from outside the first chamber to discharge said composition into the first chamber in a dispersed manner, said first sheet means having outlet means for further discharging said composition out of the first chamber when further pressed manually from outside the first chamber.

The invention will now be described by way of example with reference to the accompanying drawings in which;

Figure 1 is a perspective view of a sheet assembly for polishing work constructed in accordance with the present invention;

Figure 2 is a section taken along line II—II of Figure 1;

Figure 3 is a perspective view of another

embodiment of the present invention;

Figure 4 is a section showing a further different embodiments of the present invention;

Figure 5 is a plan view of a still further embodiment of the present invention;

Figure 6 is a perspective view of a still further embodiment of the present invention;

Figure 7 is a section taken along line VIII—VIII of Figure 6;

Figure 8 is a perspective view of a still further embodiment of the present invention; and

Figures 9, 10 and 11 are sections of still further embodiments of the present invention.

Referring to Figures 1 and 2, a sheet assembly for polishing work constructed in accordance with the present invention is shown and generally designated by the reference character A. The sheet assembly A includes a sheet 1 which may be a Japanese paper or a non-woven fabric having a surface and an interfilament spacing as rough as those of a Japanese paper. Said sheet 1 has a first side and a second side.

A sheet lamination 4 is bonded to the first side of the sheet 1 along its peripheral edge 4c by welding means or adhesive means, in such a manner that a dispersion space S is defined between the sheet lamination 4 and sheet 1, which form a first chamber. The sheet lamination 4 is made up of a non-permeable relatively thick and strong outer film 4a such as of plastic or aluminium material and a non-permeable relatively thin and weak inner film 4b such as of plastic material (preferably polyethylene), which define a sealed second chamber R therebetween. A composition 3 such as a polish is filled in the sealed chamber R. Both the outer and inner films 4a and 4b are made of transparent or translucent synthetic resin such as polyethylene. The sheet lamination 4 is formed with a plurality of apertures 4d at one of its diametrically opposite portions in order to allow the filler 3 to come out therethrough, as will be described later. The second side of the sheet 1 is coated with a thin layer 1a of polyvinyl chloride or like synthetic resin. Corner pockets 2 for receiving a user's fingers are formed on said second side of the sheet 1.

Referring to Figure 3, a sheet assembly A' according to another embodiment of the present invention includes first and second non-woven fabric sheets 5 whose facing or inner surfaces are individually coated with layers 5a of synthetic resin.

The sheets 5 are bonded together through the layers 5a by welding means along preselected opposite edges thereof as at 6. The rest of the sheets 5 spanning the bonded edges 6 forms a pocket or sack 7 into which fingers can be inserted.

One of the sheets 5 carries, on a first side thereof, the sheet lamination 4 for storing the filler which may be a shoe polish 8 in this embodiment, though the manner of storage of the filler is identical with that of the first embodiment. The position of the sheet lamination 4 is such that it

will be backed through sheet 5 by fingers which are inserted into the pocket 7.

In use, the sealed chamber R of the sheet lamination 4 is strongly pressed from behind by fingers to rupture the inner film 4b. Then, the filler 3 or 8 is discharged from the chamber R into the dispersion space S and, therefrom, to the outside of the sheet assembly via the apertures 4d by further pressing action of the fingers. The filler 3 or 8 on the sheet 1 or 5 is now ready to be applied to a desired object such as shoes.

Figure 4 shows a further embodiment of the present invention in which a retainer sheet 9 defines the sealed chamber R for storing the filler. The sheet lamination 4 composed of sheet 4a and polyethylene film 4b is laid on the retainer sheet 9 and bonded together therewith to the sheet 1 along aligned edges 4c and 9a of the sheet lamination 4 and sheet 9.

Figure 5 shows a still further embodiment of the present invention which is designed to facilitate discharge of the filler to the outside of the sheet assembly. The sheet lamination 4 in Figure 5 is bonded to the sheet 1 throughout its major area except for the sealed chamber R and the space S which is directed to the apertures 4d.

Referring to Figures 6 and 7, a still further embodiment will be described hereinafter. The first side of the sheet 1 is coated with a thin layer 1a of polyvinyl chloride or like synthetic resin. Pockets 2 for receiving fingers are formed on the same side of the sheet 1 which has the layer 1a thereon. The sheet 1 carries a sheet lamination on its first side which has the layer 1a. The sheet lamination 4 comprises a non-permeable relatively thick and strong film 4a such as a film of transparent or translucent synthetic resin typified by polyethylene or a foil of metal typified by aluminum. A non-permeable film 4b of synthetic resin is positioned inside the sheet 4a to define a sealed second chamber R in co-operation with the latter. The film 4b is shaped to be relatively thin and weak. A composition 3, which may be a polish for example, is filled in the sealed second chamber R. The sheet lamination 4 is bonded to the sheet 1 along its peripheral edge 4c by welding means or adhesive means, while defining a dispersion space S therebetween forming a first chamber. The sheet 1 is formed with a plurality of apertures 1b in its area which corresponds to the dispersion space S. The filler 3 will come out through the apertures 1b when the sheet assembly is in use, as will be described later.

Referring to Figure 8, a sheet assembly A' according to a still further embodiment includes first and second non-woven fabric sheet 5 whose facing or inner sides are individually coated with layers 5a of synthetic resin.

The sheets 5 are bonded together through the layers 5a by welder means along preselected opposite edges thereof as at 6. The rest of the sheet 5 spanning the bonded edges 6 forms a pocket or sack 7 into which fingers can be

inserted. One of the sheets 5 carries on its first side the sheet lamination 4 for storing the filler 8 which may be a shoe polish 8 in this embodiment, though the manner of storage of the filler is identical with that of the previous embodiment. The position of the sheet lamination 4 is such that it will be covered by fingers when the fingers are inserted into the pocket 7. This sheet 5 is formed with apertures 5b in its area which corresponds to the space S, in order to allow the passage of the filler 8 to the outside of the sheet assembly.

In use, the sealed chamber R of the sheet lamination 4 is strongly pressed from behind by fingers to rupture the inner film 4a. Then, the filler 3 or 8 is dislodged from the chamber R into the space S and, therefrom, to the second side of the sheet 1 or 5 via the apertures 1b to 5b. The filler 3 or 8 on the sheet 1 or 5 is now ready to be applied to a desired object such as shoes.

If desired, the apertures serving as outlets for the filler may be replaced by cuts or the like.

Figure 9 shows a still further embodiment of the present invention in which a retainer sheet 9 defines the sealed chamber R for storing the filler. The sheet lamination 4 is laid on the retainer sheet 9 and bonded together therewith to the sheet 1 along aligned edges 4c and 9a of the sheets 4 and 9.

Figure 10 shows a still further embodiment of the present invention wherein use is made of a sheet 1' constituted by a piece of non-woven fabric having a relatively rough filament structure, which permits the filler 3 to easily infiltrate thereinto. In this structure, a portion 1'b of the sheet 1 which overlies the space S serves as an outlet for the filler 3. The filler 3 will progressively ooze out through the sheet portion 1'b as the sheet assembly is rubbed against an intended object.

Figure 11 shows a still further embodiment of the present invention which includes a layer of synthetic resin 1'a coated on the first side of a sheet 1', in addition to the structural elements shown in Figure 10. The layer 1'a is formed with an opening 1'a<sub>1</sub> in its outlet portion 1'b.

Although the second chamber R sealing a polishing composition therein is adapted to be pressed by a user's fingers in the foregoing embodiments, a length of string may be attached to the relatively thin polyethylene film defining the chamber R to extend outside the sheet assembly such that the thin polyethylene film is broken by pulling the string from outside the sheet assembly.

In summary, it will be seen that a sheet assembly for polishing work of the present invention is portable and convenient for storage and can be used easily and quickly for various purposes such as shining shoes or keeping glass from misting.

It will also be seen that the sheet assembly prevents a degeneration of shoe polish or like composition over a long period of time, because the composition is retained in a sealed second chamber inside a first chamber.

## Claims

1. A sheet assembly for polishing work comprising a first sheet means (1, 4) defining a first chamber (S); a second sheet means (4b) provided in said first chamber (S) and defining a second chamber (R) therein in an air-tight sealed condition; and a composition (3) contained in said second chamber (R), characterised in that said second sheet means (4b) is bonded to said first sheet means and is formed of a plastic material rupturable when said second chamber (R) has manual force applied from outside the first chamber (S) to discharge said composition (3) into the first chamber (S) in a dispersed manner, said first sheet means (4) having outlet means (4d) for further discharging said composition (3) out of the first chamber (S) when further pressed manually from outside the first chamber (S).
2. A sheet assembly according to claim 1, characterised in that said first sheet means (4) includes a non-woven fabric sheet (1) having a first side and a second side; and a non-permeable relatively thick film bonded to said non-woven fabric sheet on said first side along a peripheral edge of said relatively thick film.
3. A sheet assembly according to claim 2, characterised in that said second sheet means (4b) includes a non-permeable relatively thin film bonded to said non-permeable relatively thick film such that a portion of said non-permeable relatively thin film defines said second chamber in cooperation with the non-permeable relatively thick film.
4. A sheet assembly according to claim 3, characterised in that said non-permeable relatively thin and thick films are of plastic material.
5. A sheet assembly according to claim 3, characterised in that said outlet means (4d) includes at least one aperture formed in said relatively thick film.
6. A sheet assembly according to claim 5, characterised by at least one pocket (2) for receiving a user's fingers, said pocket being formed on said second side of the non-woven fabric sheet (1).
7. A sheet assembly according to claim 3, characterised in that said outlet means (4d) includes at least one aperture formed in said non-woven fabric sheet.
8. A sheet assembly according to claim 7, characterised by at least one pocket (2) for receiving a user's fingers, said pocket being formed on said first side of the non-woven fabric sheet (1).
9. A sheet assembly according to claim 2, characterised in that said non-woven fabric sheet (1) is coated with a plastic layer on said first side thereof.
10. A sheet assembly according to claim 9, characterised in that said second sheet means (4b) includes a relatively thin film bonded to said plastic layer such that a portion of said relatively thin film defines said second chamber (R) in cooperation with the plastic layer.
11. A sheet assembly according to claim 3,

characterised in that said non-woven fabric sheet (1) has a relatively rough filament structure.

12. A sheet assembly according to claim 11, characterised in that said relatively rough filament structure functions as said outlet means.

13. A sheet assembly according to claim 11, characterised in that said non-fabric sheet (1) is coated with a plastic layer having an opening, said relatively rough filament functioning as said outlet means in cooperation with said opening.

## Revendications

1. Assemblage de feuilles destiné au polissage comportant un premier moyen sous forme de feuilles (1, 4) définissant une première chambre (S), un second moyen sous forme de feuilles (4b) disposé dans ladite première chambre (S) et définissant une seconde chambre (R) à l'état scellé et étanche à l'air et une composition (3) contenue dans ladite seconde chambre (R), caractérisé en ce que ledit second moyen (4b) est relié audit premier moyen et qu'il est formé d'une matière plastique susceptible, quand on y applique depuis l'extérieur de la première chambre une force manuelle, de se rompre pour laisser passer à l'état dispersé ladite composition (3) dans ladite première chambre, le premier moyen (4) étant pourvu de moyens (4d) prévus pour évacuer ladite composition (3) de la première chambre (S) quand on applique manuellement depuis l'extérieur une autre pression à la première chambre (S).

2. Assemblage de feuilles selon la revendication 1, caractérisé en ce que ledit premier moyen (4) comporte une feuille de tissu non-tissé (1) ayant une première face et une seconde face et un film imperméable relativement épais relié à ladite feuille de tissu non-tissé sur ladite première face le long d'un bord périphérique dudit film relativement épais.

3. Assemblage de feuilles selon la revendication 2, caractérisé en ce que ledit second moyen (4b) comporte un film imperméable relativement mince relié audit film imperméable relativement épais de telle façon qu'une partie du film imperméable relativement mince définit ladite seconde chambre en coopération avec le film imperméable relativement épais.

4. Assemblage de feuilles selon la revendication 3, caractérisé en ce que lesdits films imperméables relativement mince et relativement épais sont en matière plastique.

5. Assemblage de feuilles selon la revendication 3, caractérisé en ce que lesdits moyens d'évacuation (4d) comportent au moins une ouverture formée dans ledit film relativement épais.

6. Assemblage de feuilles selon la revendication 5, caractérisé en ce qu'il comporte au moins une poche (2) destinée à recevoir les doigts d'un utilisateur, ladite poche étant formée sur ladite seconde face de la feuille de tissu non-tissé (1).

7. Assemblage de feuilles selon la revendication 1,

cation 3, charakterisiert in ce que lesdits moyens d'évacuation (4d) comportent au moins une ouverture formée dans ladite feuille de tissu non-tissé.

8. Assemblage de feuilles selon la revendication 7, caractérisé en ce qu'il comporte au moins une poche (2) destinée à recevoir les doigts d'un utilisateur, ladite poche étant formée sur ladite première face de la feuille de tissu non-tissé (1).

9. Assemblage de feuilles selon la revendication 2, caractérisé en ce que ladite feuille de tissu non-tissé est revêtue sur sadite première face d'une couche plastique.

10. Assemblage de feuilles selon la revendication 9, caractérisé en ce qu'il comporte un film relativement mince relié à ladite couche plastique de telle sorte qu'une partie dudit film relativement mince définisse ladite seconde chambre (R) en coopération avec la couche plastique.

11. Assemblage de feuilles selon la revendication 3, caractérisé en ce que ladite feuille de tissu non-tissé présente une structure filamenteuse relativement grossière.

12. Assemblage de feuilles selon la revendication 11, caractérisé en ce que ladite structure filamenteuse relativement grossière fonctionne en tant que moyen d'évacuation.

13. Assemblage de feuilles selon la revendication 11, caractérisé en ce que ladite feuille de tissu non-tissé (1) est revêtue d'une couche plastique munie d'une ouverture, ladite structure filamenteuse relativement grossière fonctionnant comme moyen d'évacuation en coopération avec ladite ouverture.

#### Patentansprüche

1. Folienaufbau zum Polieren, umfassend eine erste, eine erste Kammer (S) definierende Folie (1, 4), eine zweite in jener ersten Kammer (S) vorgesehene und darin eine zweite Kammer (R) in einem luftdichten Zustand definierende Folie (4b), und eine in besagter zweiter Kammer (R) enthaltene Masse (3), dadurch gekennzeichnet, dass jene zweite Folie (4b) mit der ersten Folie verbunden und aus einem Kunststoffmaterial gebildet ist, das bei Aufbringen einer manuellen Kraft von der Aussenseite der ersten Kammer (S) her auf jene zweite Kammer (R) zur feinverteilten Abgabe jener Masse (3) in die erste Kammer (S) zerreibbar ist, wobei besagte erste Folie (4) Auslassmittel (4d) zur weiteren Abgabe dieser Masse (3) aus der ersten Kammer (S) bei weiterem manuellen Zusammenpressen von der Aussenseite der ersten Kammer (S) her enthält.

2. Folienaufbau nach Anspruch 1, dadurch gekennzeichnet, dass jene erste Folie (4) eine Vlies-

folie (1) mit einer ersten Seite und einer zweiten Seite enthält, und dass eine undurchlässige, relativ dicke Folie mit jener Vliesfolie auf besagter erster Seite entlang einer Umfangskante dieser relativ dicken Folie verklebt ist.

3. Folienaufbau nach Anspruch 2, dadurch gekennzeichnet, dass jene zweite Folie (4b) eine undurchlässige relativ dünne Folie enthält, die mit der besagten undurchlässigen relativ dicken Folie so verklebt ist, dass ein Teil dieser undurchlässigen relativ dünnen Folie zusammen mit der undurchlässigen relativ dicken Folie eine zweite Kammer definiert.

4. Folienaufbau nach Anspruch 3, dadurch gekennzeichnet, dass jene undurchlässigen dünnen und dicken Folien aus Kunststoffmaterial bestehen.

5. Folienaufbau nach Anspruch 3, dadurch gekennzeichnet, dass jenes Auslassmittel (4d) mindestens eine in jener relativ dicken Folie gebildete Öffnung enthält.

6. Folienaufbau nach Anspruch 5, gekennzeichnet durch mindestens eine Tasche (2) zur Aufnahme der Finger eines Benutzers, wobei diese Tasche in jener zweiten Seite der Vliesfolie (1) gebildet ist.

7. Folienaufbau nach Anspruch 3, dadurch gekennzeichnet, dass jenes Auslassmittel (4d) mindestens eine in jener Vliesfolie gebildete Öffnung enthält.

8. Folienaufbau nach Anspruch 7, gekennzeichnet durch mindestens eine Tasche (2) zur Aufnahme der Finger eines Benutzers, wobei diese Tasche auf jener ersten Seite der Vliesfolie (1) gebildet ist.

9. Folienaufbau nach Anspruch 2, dadurch gekennzeichnet, dass jene Vliesfolie (1) auf ihre besagten ersten Seite mit einer Kunststoffsicht überzogen ist.

10. Folienaufbau nach Anspruch 9, dadurch gekennzeichnet, dass jene zweite Folie (4b) eine relativ dünne Folie enthält, die mit jener Kunststoffsicht so verklebt ist, dass ein Teil dieser relativ dünnen Folie zusammen mit der Kunststoffsicht jene zweite Kammer (R) definiert.

11. Folienaufbau nach Anspruch 3, dadurch gekennzeichnet, dass jene Vliesfolie (1) eine relativ unregelmässige Fadenstruktur aufweist.

12. Folienaufbau nach Anspruch 11, dadurch gekennzeichnet, dass diese relativ unregelmässige Fadenstruktur als besagtes Auslassmittel dient.

13. Folienaufbau nach Anspruch 11, dadurch gekennzeichnet, dass jene Vliesfolie (1) mit einer eine Öffnung aufweisenden Kunststoffsicht überzogen ist, wobei die relativ unregelmässige Fadenstruktur zusammen mit jener Öffnung als besagtes Auslassmittel dient.

FIG.1

A

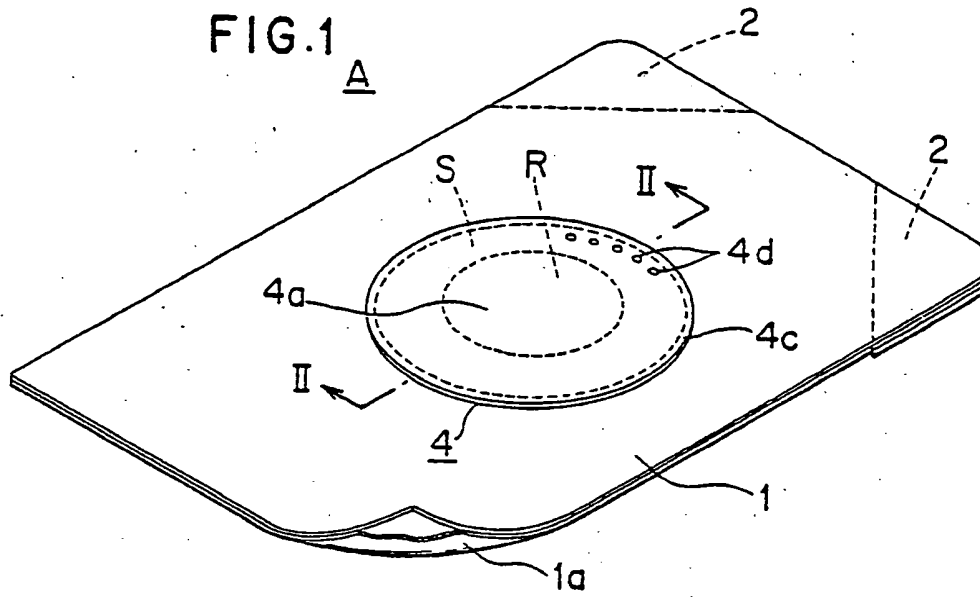


FIG.2

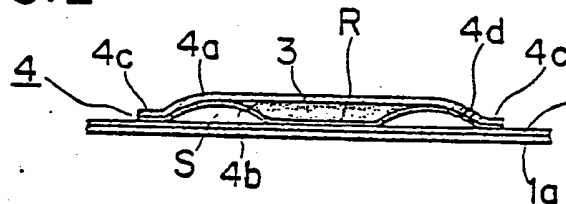


FIG.3

A'

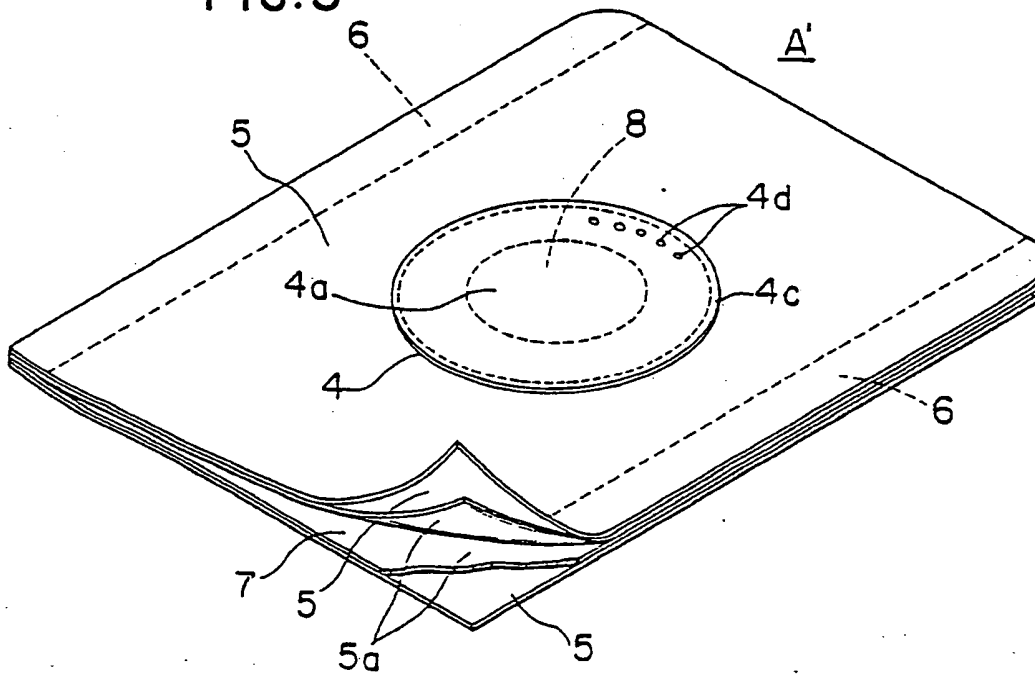


FIG. 4

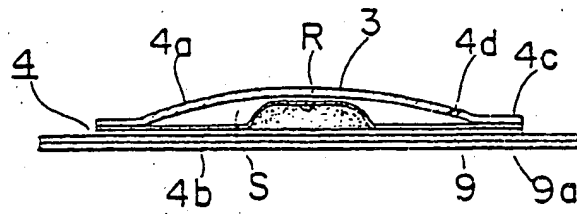


FIG. 5

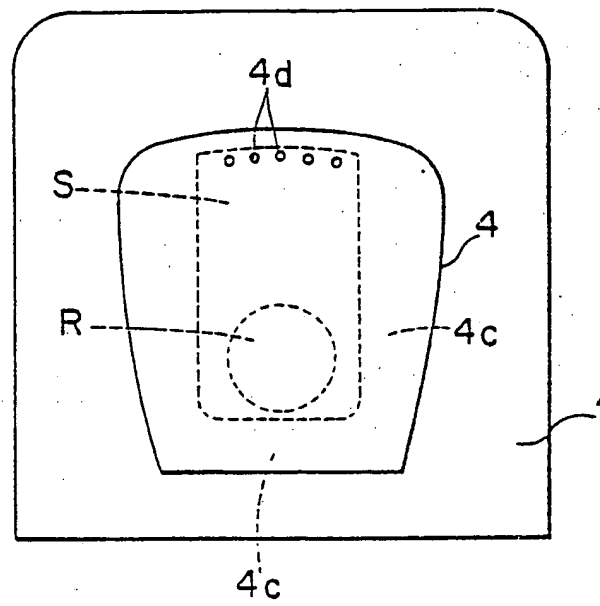


FIG. 6 A

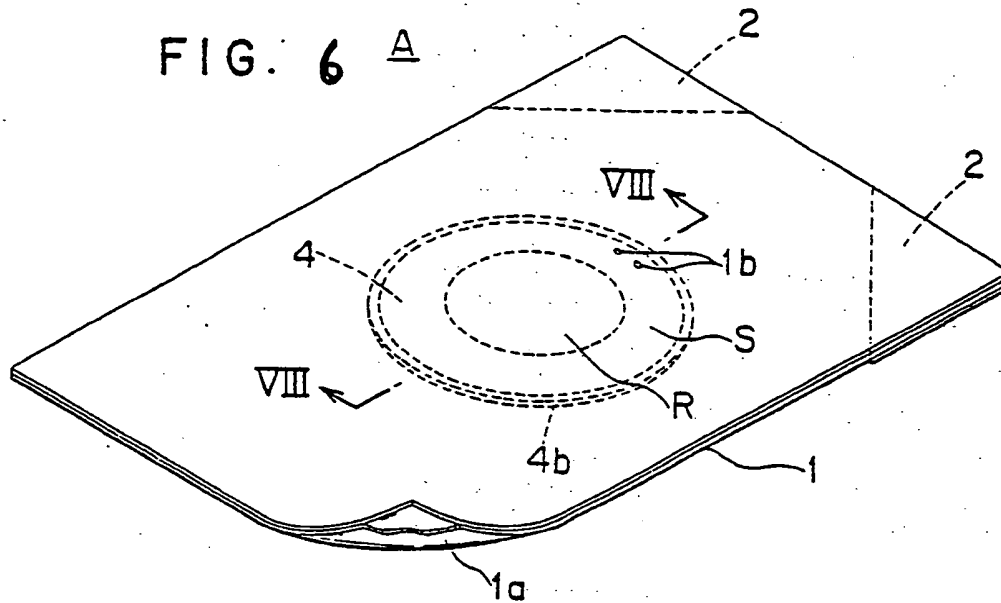


FIG. 7

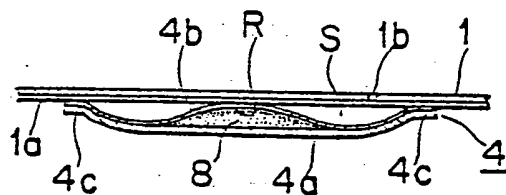


FIG. 8

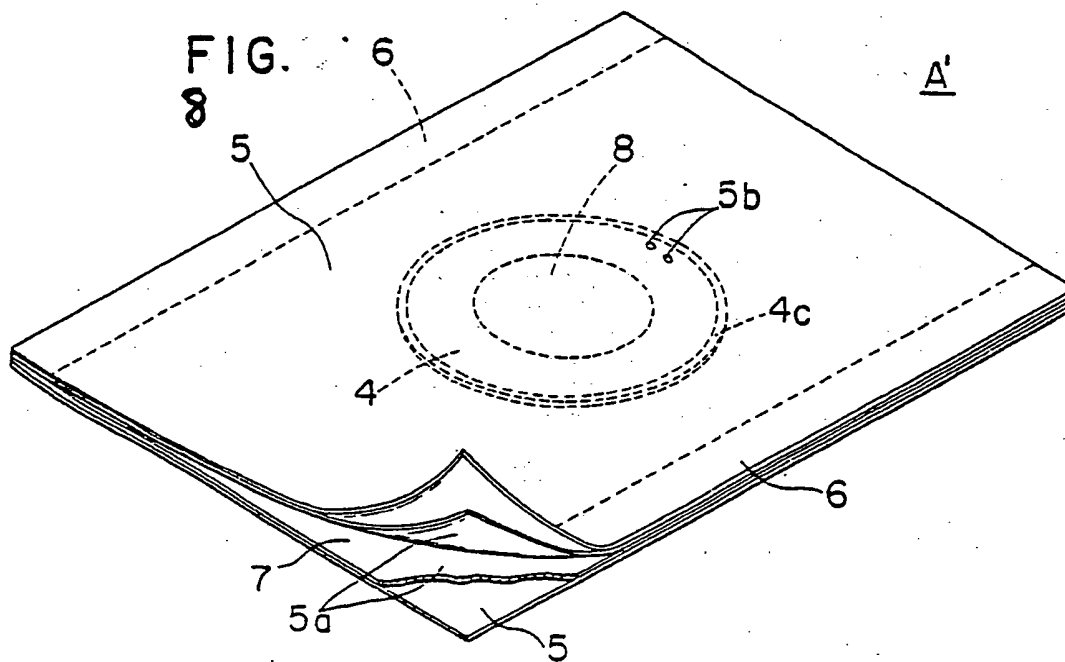




FIG. 9

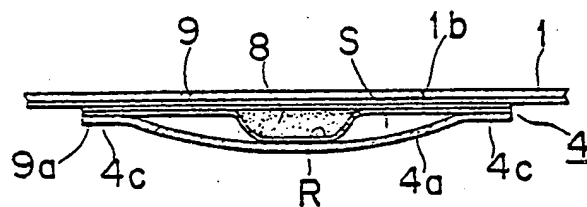


FIG. 10

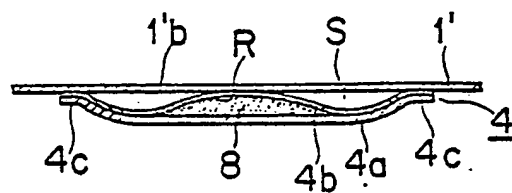
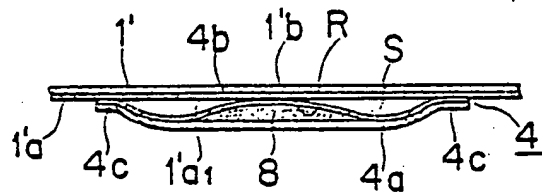


FIG. 11



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